

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

124



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/392,550	09/09/1999	ERNEST YIU CHEONG WAN	169.1444	1386
5514	7590	09/13/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			YUAN, ALMARI ROMERO	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/392,550

Applicant(s)

CHEONG WAN, ERNEST YIU

Examiner

Almari Yuan

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-51 and 54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. \_\_\_\_\_
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 and 54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: RCE filed on 6/18/04 and After Final Amendment filed on 4/19/04.
2. The rejection of claims 1-51 and 54 rejected under 35 U.S.C. 112, first paragraph has been withdrawn based on arguments presented in the After Final Amendment filed on 4/19/04.
3. Claims 1-51 and 54 are pending in the case. Claims 1, 17, 18, 19, 20, 36, and 54 are independent claims.

---

#### ***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/18/04 has been entered.

---

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2176

6. Claims 1-16, 20-51, and 54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**Regarding independent claims 1, 20, 36, and 54**, the claimed feature “user interpretable functional link” and “functional link” is not enabled in the specification. Applicant is advised against the addition of new matter.

**Regarding dependent claims 1-16, 21-35, and 37-51** are rejected for fully incorporating the deficiencies of their respective base claims.

---

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda (EP 0775962 A2 – published on 05/1997) in view of Hube (USPN 5,337,161- issued on 08/1994).**

**Regarding independent claims 1, 20, and 36**, Yoda discloses:

A method of creating a document suitable for hard copy reproduction (Yoda on col. 1, lines 1-6: teaches printing information of a digital document such as a hypermedia document, or the like), said method comprising the steps of:

Art Unit: 2176

(a) receiving information from at least one electronic source document, said information including a plurality of referential links establishing corresponding referential paths between components of the information (Yoda on col. 5, lines 33-48 and col. 6, lines 24-40: teaches reception of a first document information; link information extraction unit analyzes first document information, extracts, as link information, the name of another document information to which first document information is linked);

(b) defining a physical structure of the document suitable for hard copy reproduction and sufficient to reproduce the information (Yoda on col. 10, line 32 – col. 11, line 4: teaches designating a base document information and a series of document information to which the base document information is linked are printed);

(c) defining a plurality of document links associated with the physical structure and corresponding to the links (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches a base document and a series of documents that are linked to the based document can be inserted with pages numbers upon printing);

(d) assigning a user interpretable functional link to each the document link; and (e) arranging a number of the functional links by assigning plural ones of the document links to at least an individual one of the functional links (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches link information extracted from the received document as a base document can determine other documents that is linked to; generating page numbers (user interpretable functional link) on the base document and on each linked document when printing. Also see Figure 2 shows information links of a document “Information 1” is assigned a page number and in Figure 10 shows the document “Information 1” corresponding to page 10).

Art Unit: 2176

However, Yoda does not explicitly disclose "user interpretable functional links", however, on col. 5, lines 33-48 and col. 7, lines 23-30: teaches generating new page number on the basis of the page number of the previously printed document information upon printing document information, in other words, printing page numbers for each linked document can determine the sequence of the printed linked documents.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

---

However, Yoda does not explicitly disclose "traversable physical path".

Hube on col. 2, lines 13-27 and see Abstract teaches an electronic reprographic printing that extracts a tab image from a print job, document or memory for printing on tab stock (traversable physical path). The tab images are stored sequentially in the system memory and may be edited as required. The print out of a tab stock is used to help the user navigate through a sequence of pages of a document.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way print tab stock from an stored tab image of a document, as taught by Hube, incorporated into the printing environment of electronic documents, as taught by Yoda, in order to enhance the capability of editing the tab sequence of an electronic document prior to printing out.

**Regarding dependent claims 2, 21, and 37, Yoda discloses:**

Art Unit: 2176

wherein the physical structure comprises at least one single page and the functional links comprise at least one indicium printable onto the single page, and step (e) comprises merging plural ones of the document links to form a single the indicium associated with a component on the page (Yoda on col. 5, lines 33-48: teaches pages numbers (indicia) printed on each document (printable page); on col. 10, lines 32-55: teaches table of contents as the base document linked to other documents).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

**Regarding dependent claims 3, 22, and 38,** Yoda discloses the invention substantially as claimed as described *supra*. However, Yoda does not explicitly disclose “at least one cut-out tab formed in at least one of the pages”.

Hube on col. 7, lines 5-12 and col. 8, lines 47-55, see figure 17: teaches creating a print job such as a hard copy document having tab images to be placed on a designated position on the document for printing.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way to create and print tabs on a designated position on the printed document incorporated into the printed page numbers on the printed hypermedia document in order to increase the flexibility and efficiency in making tabs and wherein the print job can be re-ordered easily.

**Regarding dependent claims 4, 23, and 39,** Hube discloses:



wherein at least one the cut-out tab is formed as part of a nest of correspondingly located tabs associated with plural ones of the pages (Hube on col. 2, lines 13-27, col. 7, lines 5-12 and col. 8, lines 47-55, see figure 17: teaches output position of a tab is determined base on the other tab images inserted in the other documents to be printed).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way to create and print tabs on a designated position on the printed document incorporated into the printed page numbers on the printed hypermedia document in order to increase the flexibility and efficiency in making tabs and wherein the print job can be re-ordered easily.

---

**Regarding dependent claims 5, 24, and 40, Yoda discloses:**

retaining structure definitions of the document in a template for formatting at least one subsequent document in a corresponding fashion (Yoda on col. 6, lines 24040: teaches the document is in HTML format and wherein the link information is extracted to identify other documents).

---

**Regarding dependent claims 6, 25, and 41, Yoda discloses:**

defining a presentational style to the document and applying the presentational style to the functional links to distinguish the functional links from the components (Yoda on col. 10, line 32- col. 11, line 4: teaches how the plurality of documents are linked together and how will they be printed; on col. 5, lines 33-48: teaches each linked document will have an inserted page number (functional links) upon printing).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers

Art Unit: 2176

incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

**Regarding dependent claims 7, 26, and 42, Yoda discloses:**

retaining the presentational style of the document in a template for formatting at least one subsequent document with the presentational style (Yoda on col. 10, line 32- col. 11, line 4: teaches print unit reads out the contents of the information print history and writes the read out contents in the print buffer as a list for printing).

**Regarding dependent claims 8, 27, and 43, Yoda discloses:**

defining content specific document links and incorporating corresponding functional links into the document (Yoda on col. 5, lines 33-48: teaches extracting link information from received document; inserting page numbers (functional links) upon printing the document and associated linked documents).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

**Regarding dependent claims 9, 28, and 44, Yoda discloses:**

wherein said content specific document links are user defined (Yoda on col. 10, line 32- col. 11, line 4: teaches users designate the base document and a series of documents is linked to the based document for printing).

**Regarding dependent claims 10, 29, and 45, Yoda discloses:**

Art Unit: 2176

associating a predetermined stylistic layout with the arranged functional links so as to vary a hardcopy reproduction of the document (Yoda on col. 10, line 32- col. 11, line 4, see figure 8: teaches a layout of how the documents are going to be printed in a sequence pattern).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

**Regarding dependent claims 11, 30, and 46, Hube discloses:**

wherein the predetermined stylistic layout implements the formation of cut-out tabs as at least some of the arranged functional links (Yoda on col. 5, lines 33-48: teaches each linked document will have an inserted page number (functional links) upon printing) and (Hube discloses "cut-out tabs" on col. 7, lines 5-12 and col. 8, lines 47-55, see figure 17: teaches creating a print job such as a hard copy document having tab-images to be placed on a designated position on the document for printing).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way to create and print tabs on a designated position on the printed document incorporated into the printed page numbers on the printed hypermedia document in order to increase the flexibility and efficiency in making tabs and wherein the print job can be re-ordered easily.

**Regarding dependent claims 12, 31, and 47, Yoda discloses:**

wherein step (e) comprises grouping the document links according to predetermined criteria associated with the document links, each the group having associated therewith at least

Art Unit: 2176

one corresponding arranged functional link (Yoda on col. 10, lines 32-55: teaches the table of contents as the base document contains a plurality of link information that corresponds to other documents; col. 10, line 56- col. 11, line 4: teaches documents linked to the base document are printed; on col. 8, lines 50-58: teaches assigns page numbers to linked documents).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

**Regarding dependent claims 13, 32, and 48, Yoda discloses:**

---

importing the information into the structure to form the document; and (eb) applying the arranged links to the document (Yoda on col. 5, lines 33-48: teaches assigning page numbers (optimized links) to each printing linked document).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

**Regarding dependent claims 14, 33, and 49, Hube discloses:**

(ec) identifying those of the document links that either (i) start or (ii) end on respective common pages of the document; (ed) for each the common page, grouping together corresponding document links identified at step (ec); and (ee) providing a cut-out tab functional link corresponding to each the group of document links (Yoda on col. 10, line 32 – col. 11, line 4: teaches designating a base document and a series of document to which the base document is

Art Unit: 2176

linked to) and (Hube discloses “providing a cut-out tab” on col. 7, lines 5-12 and col. 8, lines 47-55, see figure 17: teaches creating a print job such as a hard copy document having tab images to be placed on a designated position on the document for printing).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way to create and print tabs on a designated position on the printed document incorporated into the printed page numbers on the printed hypermedia document in order to increase the flexibility and efficiency in making tabs and wherein the print job can be re-ordered easily.

**Regarding dependent claims 15, 34, and 50, Hube discloses:**

limiting each group of document links to those that either (i) end on different ones of pages or (ii) start on different ones of the pages, as the case may be, and step (ee) comprises providing a set of nested cut-out tab functional links, such that each member of the set corresponds to one the document link of a corresponding group (Yoda on col. 10, line 32 – col.

11, line 4: teaches the user can designate a base document as a start page for printing) and (Hube discloses “set of nested cut-out tab” on col. 2, lines 13-27, col. 7, lines 5-12 and col. 8, lines 47-55, see figure 17: teaches output position of a tab is determined base on the other tab images inserted in the other documents to be printed).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way to create and print tabs on a designated position on the printed document incorporated into the printed page numbers on the printed hypermedia document in order to increase the flexibility and efficiency in making tabs and wherein the print job can be re-ordered easily.

**Regarding dependent claims 16, 35, and 51, Yoda discloses:**

wherein the groups are formed based upon a determinable relationship between corresponding the components of the information (Yoda on col. 10, line 32 – col. 11, line 4: teaches a table of contents (group of link information) can be used to determine its linked document (relationship to each other by link information).

**Regarding independent claim 17, Yoda discloses:**

An authoring system for creating of a linear document that includes non-linear referential links (Yoda on col. 1, lines 37-42: teaches printing a hypermedia document is a conversion from non-linear information to linear information), said system including:

---

means for specifying a linear document structure and the hyperlinks of a hypermedia source document (Yoda on col. 1, lines 37-42 and col. 5, lines 33-48: teaches linear document are managed by a sequence of page numbers; inserting page numbers to a hypermedia document by extracting link information corresponding to other linked documents);

---

means associating the hyperlinks with physical links able to be formed in pages of the linear document (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches a base document and a series of documents (hyperlinked documents) that are linked to the based document can be inserted with pages numbers (physical links) upon printing);

---

means for modelling each the physical link using a one-dimensional vector; means arranging an assignment of the physical links to one or more of the hyperlinks (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches link information (hyperlink) extracted from the received document as a base document can determine other documents that is linked to;

---

Art Unit: 2176

generating page numbers (physical link) on the base document and on each linked document when printing).

Yoda does disclose "physical links" on col. 5, lines 33-48 and col. 7, lines 23-30: teaches generating new page number on the basis of the page number of the previously printed document information upon printing document information, in other words, printing page numbers for each linked document can determine the sequence of the printed linked documents.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

However, Yoda does not explicitly disclose "traversable physical path".

Hube on col. 2, lines 13-27 and see Abstract teaches an electronic reprographic printing that extracts a tab image from a print job, document or memory for printing on tab stock (traversable physical path). The tab images are stored sequentially in the system memory and may be edited as required. The print out of a tab stock is used to help the user navigate through a sequence of pages of a document.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way print tab stock from an stored tab image of a document, as taught by Hube, incorporated into the printing environment of electronic documents, as taught by Yoda, in order to enhance the capability of editing the tab sequence of an electronic document prior to printing out.

**Regarding independent claim 18, Yoda discloses:**

Art Unit: 2176

An authoring system for creating a linear document that includes non-linear referential links

(Yoda on col. 1, lines 37-42: teaches printing a hypermedia document is a conversion from non-linear information to linear information), said system comprising:

means for assessing hyperlinks within a source hypermedia document to which a linear document structure is to be applied (Yoda on col. 1, lines 37-42 and col. 5, lines 33-48: teaches analyzing document to extract link information, name of another document that is linked to (accessing hyperlinks); linear document are managed by a sequence of page numbers; inserting page numbers to a hypermedia document by extracting link information corresponding to other linked documents);

---

means associating the hyperlinks with physical links able to be formed in pages of the linear document (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches a base document and a series of documents (hyperlinked documents) that are linked to the based document can be inserted with pages numbers (physical links) upon printing);

---

means for modelling each physical link using a one-dimensional vector; means for arranging an assignment of the physical links to one or more of the hyperlinks (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches link information (hyperlink) extracted from the received document as a base document can determine other documents that is linked to; generating page numbers (physical link) on the base document and on each linked document when printing).

Yoda does disclose “physical links” on col. 5, lines 33-48 and col. 7, lines 23-30: teaches generating new page number on the basis of the page number of the previously printed document



Art Unit: 2176

information upon printing document information, in other words, printing page numbers for each linked document can determine the sequence of the printed linked documents.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

However, Yoda does not explicitly disclose “traversable physical path”.

Hube on col. 2, lines 13-27 and see Abstract teaches an electronic reprographic printing that extracts a tab image from a print job, document or memory for printing on tab stock

(traversable physical path). The tab images are stored sequentially in the system memory and may be edited as required. The print out of a tab stock is used to help the user navigate through a sequence of pages of a document.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way print tab stock from an stored tab image of a document, as taught by Hube, incorporated into the printing environment of electronic documents, as taught by Yoda, in order to enhance the capability of editing the tab sequence of an electronic document prior to printing out.

**Regarding independent claim 19,** Yoda discloses:

A system for creating a linear document that includes non-linear referential links (Yoda on col. 1, lines 37-42: teaches printing a hypermedia document is a conversion from non-linear information to linear information), said system comprising:

Art Unit: 2176

means for assessing hyperlinks within a source hypermedia document to which a linear document structure is to be applied (Yoda on col. 1, lines 37-42 and col. 5, lines 33-48: teaches analyzing document to extract link information, name of another document that is linked to (accessing hyperlinks); linear document are managed by a sequence of page numbers; inserting page numbers to a hypermedia document by extracting link information corresponding to other linked documents);

means associating the hyperlinks with physical links able to be formed in pages of said linear document (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches a base document and a series of documents (hyperlinked documents) that are linked to the based

---

document can be inserted with pages numbers (physical links) upon printing);

means for modelling each physical link using a one-dimensional vector; means for arranging an assignment of said physical links to one or more of the hyperlinks (Yoda on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches link information (hyperlink) extracted from the received document as a base document can determine other documents that is linked to; generating page numbers (physical link) on the base document and on each linked document when printing);

means for applying the linear document structure and the arranged physical links to the hypermedia document to produce the linear document; and means for reproducing the linear document (Yoda on col.1, lines 37-42: teaches linear document are managed by a sequence of page numbers (physical links); printing a hypermedia document is a conversion from non-linear information to linear information).

Art Unit: 2176

Yoda does not explicitly disclose “physical links”, however, on col. 5, lines 33-48 and col. 7, lines 23-30: teaches generating new page number on the basis of the page number of the previously printed document information upon printing document information, in other words, printing page numbers for each linked document can determine the sequence of the printed linked documents.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

---

However, Yoda does not explicitly disclose “traversable physical path”.

Hube on col. 2, lines 13-27 and see Abstract teaches an electronic reprographic printing that extracts a tab image from a print job, document or memory for printing on tab stock (traversable physical path). The tab images are stored sequentially in the system memory and may be edited as required. The print out of a tab stock is used to help the user navigate through a sequence of pages of a document.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way print tab stock from an stored tab image of a document, as taught by Hube, incorporated into the printing environment of electronic documents, as taught by Yoda, in order to enhance the capability of editing the tab sequence of an electronic document prior to printing out.

**Regarding independent claim 54**, Yoda discloses:

A hard copy document comprising:

Art Unit: 2176

information received from at least one electronic source document, the source document including a plurality of non-linear referential links establishing corresponding referential paths between components of the information (Yoda on col. 1, lines 37-42, col. 5, lines 33-48 and col. 6, lines 24-40: teaches reception of a first document information; link information extraction unit analyzes first document information, extracts, as link information, the name of another document information to which first document information is linked; a hypermedia document containing links (referential links) can be converted from non-linear information to linear information for printing); and

a user interpretable functional link with a part thereof corresponding to plural ones of the non-linear referential links, wherein the user interpretable functional link is part of a plurality of user interpretable functional links formed in said hard copy document and provides user paths spanning plural pages of the hard copy document between corresponding components of the information (Yoda on col. 1, lines 37-42, col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches link information extracted from the received document as a base document can determine other documents that is linked to (non-linear referential links); generating page numbers (user interpretable functional link) on the base document and on each linked document when printing).

Yoda does not explicitly disclose “user interpretable functional links”, however, on col. 5, lines 33-48 and col. 7, lines 23-30: teaches generating new page number on the basis of the page number of the previously printed document information upon printing document information, in other words, printing page numbers for each linked document can determine the sequence of the printed linked documents.

Art Unit: 2176

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Yoda to provide a way to generate page numbers incorporated into each printed linked document to indicate the sequence of linked documents in order to print a hypermedia document in a format that a user can easily use.

However, Yoda does not explicitly disclose “traversable physical path”.

Hube on col. 2, lines 13-27 and see Abstract teaches an electronic reprographic printing that extracts a tab image from a print job, document or memory for printing on tab stock (traversable physical path). The tab images are stored sequentially in the system memory and may be edited as required. The print out of a tab stock is used to help the user navigate through a sequence of pages of a document.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Hube into Yoda to provide a way print tab stock from an stored tab image of a document, as taught by Hube, incorporated into the printing environment of electronic documents, as taught by Yoda, in order to enhance the capability of editing the tab sequence of an electronic document prior to printing out.

### ***Response to Arguments***

9. Applicant's arguments filed 4/19/04 have been fully considered but they are not persuasive.

#### **Regarding Applicant's remarks on pages 20-21:**

Referring to independent claim 1, Applicant argues that Hube does not teach or suggest “referential links”, however, Yoda discloses this feature on col. 5, lines 33-48 and col. 6, lines

24-40: teaches link information extraction unit analyzes first document information, extracts, as link information, the name of another document information to which first document information is linked, in other words, the document contains a link or refers to another document.

Hube discloses “traversable physical path”, on col. 2, lines 13-27 and see Abstract teaches an electronic reprographic printing that extracts a tab image from a print job, document or memory for printing on tab stock (traversable physical path). The tab images are stored sequentially in the system memory and may be edited as required. The print out of a tab stock is used to help the user navigate through a sequence of pages of a document.

Yoda also discloses “hyperlinking between content of the original source document”, see Abstract teaches printing a hypermedia document; wherein the hypermedia document contains links that are extracted for printing.

**Regarding Applicant's remarks on page 22:**

Yoda does disclose the “arranging step” on col. 5, lines 33-48 and col. 10, line 32 – col. 11, line 4: teaches link information extracted from the received document as a base document can determine other documents that is linked to and generate page numbers for documents containing a plurality of links. See Figure 2 shows a document “Information 1” containing a plurality of links; wherein “Information 1” is assigned a page number (see figure 10 shows a table of the arrangement of page numbers corresponding to information links and also shows “Information 1” corresponds to page 10 (function link)).

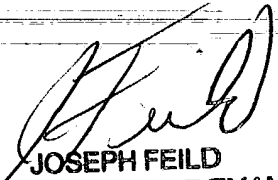
***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almari Yuan whose telephone number is 703-305-5945. The examiner can normally be reached on Mondays - Fridays (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached on 703-305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AY  
September 7, 2004

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER